

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the Application:

1. (Currently amended) A method for connecting a vessel to another vessel comprising:

providing a synthetic graft vessel having a first end and a second end, the second end coupled with a stent such that portions of the stent are fixedly attached to the second end of the graft vessel, wherein the stent defines an outer diameter when in an uncompressed state;

anastomosing the first end of the graft vessel to a side of an artery to yield an end-to-side anastomosis;

inserting an introducer into a vein at a vein opening;

inserting a sheath into the vein such that, when both the introducer and the sheath are in the vein, at least a portion of the introducer is within the sheath;

removing the introducer from the vein;

inserting, after removal of the introducer from the vein, the second end of the graft vessel into the sheath such that at least a portion of the stent is within the vein, wherein the vein, at a position of the vein opening, has an inner

diameter equal to or smaller than the outer diameter of the stent defined by the stent when in an uncompressed state; and

removing the sheath from the vein such that the second end of the graft vessel is anastomosed to the vein via the stent to yield an end-to-end anastomosis, wherein a first end of the stent is within the vein and a second end of the stent is outside the vein in which a portion of the vein to which the second end of the graft vessel is anastomosed becomes a terminal portion of the vein.

2. (Cancelled)

3. (Cancelled)

4. (Previously presented) The method of claim 1, wherein the stent is fixedly attached to the second end of the graft vessel via a polymer.

5. (Cancelled)

6. (Cancelled)

7. (Withdrawn) The method of claim 1, wherein removing the sheath from the vein allows the stent to unfold.

8. (Withdrawn) The method of claim 1, wherein removing the sheath from the vein allows the stent to expand.

9-25. (Cancelled)

26. (Previously presented) The method of claim 4, wherein the polymer is a polyurethane.

27. (Previously presented) The method of claim 1, wherein the stent is fixedly attached to the exterior surface of the graft vessel.

28. (Previously presented) The method of claim 1, wherein when the sheath is removed from the vein, a perimeter length of the second end of the graft vessel remains substantially constant.

29. (Previously presented) The method of claim 1, wherein the first end of the graft vessel is anastomosed to the artery before the second end of the graft vessel is anastomosed to the vein.

30. (Previously presented) The method of claim 1, wherein the second end of the graft vessel is anastomosed to the vein before the first end of the graft vessel is anastomosed to the artery.

31. (Previously presented) The method of claim 1, wherein the first end of the graft vessel is anastomosed to the artery without suturing.

32-46. (Cancelled)

47. (Previously presented) The method of claim 1, further comprising compressing the stent prior to inserting the second end of the graft vessel into the sheath.